

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

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FEDERAL COMMUNICATIONS COMMISSION  
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In the Matter of )

The Development of Operational, )  
Technical, and Spectrum )  
Requirements for Meeting )  
Federal, State and Local Public )  
Safety Agency Communication )  
Requirements Through the )  
Year 2010 )

WT Docket No. 96-86

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To: The Commission

**COMMENTS OF THE COUNTY OF LOS ANGELES**

The County of Los Angeles ("County"), by its attorneys, hereby submits the following comments in response to the Commission's Notice of Proposed Rulemaking in the above-captioned "Public Safety Spectrum Needs" proceeding, FCC 96-155, released April 10, 1996.

The County contains a population of over 9 million citizens in an area of about 4,000 square miles that includes such varied terrain as the densely populated Los Angeles Basin, mountain peaks and valleys, islands, and deserts. The County's public safety agencies, including the Sheriff's Department, Fire Department, and Emergency Medical Services Agency, are heavily dependent upon highly sophisticated communications systems. The County operates extensive wide-area land-mobile radio systems for its operations which utilize frequencies in the UHF, VHF, and 800 MHz bands. In addition, the County's public safety communications systems depend on a complex network of microwave links to provide necessary infrastructure.

The County and other government entities in Southern California have a substantial need for additional spectrum and more efficient technologies to expand their capabilities. Therefore, the County fully agrees with and supports the findings and recommendations of the Public Safety Wireless

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Advisory Committee ("PSWAC") Final Report as presented to the FCC and NTIA.<sup>1</sup> The following is intended to emphasize those issues of particular concern to the County.

### **Spectrum Requirements**

The County stresses the immediacy cited and documented in the PSWAC Executive Summary, and urges the FCC to act without further delay in allocating 2.5 MHz of spectrum for interoperability, an additional 25 MHz within five years, and development of a comprehensive plan and commitment to provide an additional 70 MHz of spectrum for public safety use over the next 15 years. The FCC must realize that the "immediate" need is just that. Any delay only contributes to the life-threatening impact that the existing spectrum shortfall presents. Contrary to popular opinion, it does not "go without saying" that public safety needs additional spectrum. Public safety agencies nationwide have been "saying it" all along, and now it is imperative that the FCC do the right thing, right now.

The County would like to emphasize the importance of allocating an additional 161 MHz of microwave spectrum for public safety's vital links, as discussed in Appendix I of the Final Report of the PSWAC Spectrum Requirements Subcommittee. As mentioned above, the County relies on an extensive backbone microwave network for its public safety communications systems. Although the County does use fiber optics on a limited basis, it is not a suitable alternative for most applications because of the seismic activity endemic to California in general, and the Los Angeles Basin in particular. Additionally, problems obtaining right-of-way, prohibitive costs to run fiber to mountaintops, and inadequate reliability of fiber backbones makes the need for additional microwave frequencies a pressing concern for the County's public safety agencies. The microwave infrastructure in the County's geographically diverse region must be expanded to meet the growing needs of its

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<sup>1</sup> Personnel from the County's Sheriff's Department, Fire Department and Internal Services Department were active participants in the PSWAC proceedings.

public safety providers. The public safety microwave community deserves assurance from the Commission that current and future spectrum requirements will be met, and that allocations will be long-term. This great need for additional microwave spectrum should be given the utmost consideration in making allocation decisions.

### **Use of Commercial Services**

The County believes it is not possible or probable for public safety agencies to use commercial services for routine day-to-day dispatch and other mission-critical communications. First, no commercial system provider would be willing to assume the inherent liability in offering such service, and it is doubtful that a public agency would be willing to grant immunity from liability. Second, commercial providers have very little incentive to build-out their systems to serve unpopulated areas where public safety requires service levels and transmission quality equivalent to that provided in populated, urban areas. Most important, commercial providers cannot provide the same reliability of service that is built into public safety systems.

That is not to say that public safety agencies deliberately avoid utilizing commercial services to fulfill their needs. The growing use by public safety agencies of paging and cellular telephone service for non-emergency communication is the best example. Likewise, many commercial wireless digital data systems are evolving, and will attract public safety users. Digital mapping and imaging, vehicle tracking, and other commercial applications are either already in use, or will be prior to the end of the decade. However, primary dispatch radio channels and other mission-critical operations must remain under the sole authority of public safety communications providers to ensure that the requirements of reliability, redundancy, priority access, coverage, and reasonable cost are met.

### **Radio System Consolidation and Trunking**

The County would like to caution the Commission about any reliance on the concept of consolidation of communications systems by multiple public safety agencies as a means to achieve efficient use of the spectrum. Consolidation by itself does not imply spectrum efficiency, and in fact can create substantial inefficiency if not subject to firm local control, proper planning, coordination, and cooperation. It requires the willing consent of all participants who engage in decision making at the local level, and cannot be subject to federal mandate.

The Commission requests comment on the use of trunking as an alternative means to create more efficient use of spectrum. The County believes that utilization of trunking technology is a highly promising method to relieve channel congestion in heavily populated areas where systems are regularly overwhelmed during peak periods. On the other hand, where population is less dense, and system overload rarely occurs, trunking technology offers very little. Because of the potential benefits that trunking technology may provide to public safety systems, it is important that public safety professionals be aware that it is an alternative when substantial throughput requires relief options. However, trunking should not be mandated by the Commission.

### **Technical Standards**

The Commission should adopt technical standards for receivers. Specifying standards will encourage equipment manufacturers to focus on minimizing channel spacing. In turn, this will increase receiver and system performance, while helping to minimize potential interference. At the same time, the Commission's goal of achieving efficient use of spectrum will be enhanced.

### **Frequency Coordination**

The County of Los Angeles is strongly opposed to public safety coordination being performed by any entity other than APCO-International. APCO's performance as coordinator has drawn widespread praise from all sectors of the public safety community, and is uniquely positioned to best meet that community's needs.

### **Spectrum Options**

The possibility of reallocation of a portion of UHF-TV spectrum between channels 60-69 for public safety use has been advanced in the Digital Television proceeding.<sup>2</sup> The County and others have voiced support for this proposal in earlier letters to the Commission. The spectrum in question is adjacent to the 800 MHz spectrum already used for public safety, and would be an ideal fit to satisfy a portion of the spectrum requirements identified by PSWAC. In addition, much of this spectrum could be recovered immediately, and thus its reallocation for public safety use would help to address the short-term spectrum demands of numerous public safety agencies. The spectrum could also enhance interoperability and facilitate the implementation of new technologies.

A portion of federal spectrum currently allocated to the Department of Defense ("DOD") could also help satisfy the short-term needs of public safety communications. Spectrum located between 380 to 399.9 MHz, and 138 to 144 MHz that is currently part of the military band might be ideal for public safety use. The DOD has objected to any reallocation of this spectrum. However, the Commission should pursue an independent analysis of the issue to provide an unbiased objective assessment and appraisal of the potential for reallocation or sharing of the spectrum.

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<sup>2</sup> See *In re Advanced Television Systems and Their Impact Upon Existing Television Broadcast Service*, Sixth Further Notice of Proposed Rulemaking, MM Docket 87-268 (released Aug. 14, 1996).

### **Spectrum Refarming**

The County also believes that the Commission should set a mandate that requires users in frequencies below 800 MHz to switch to narrower band operation by 2005, as urged by APCO in the Commission's spectrum refarming proceeding.<sup>3</sup> The Commission's current reliance on equipment type-acceptance could allow a few small agencies in a metropolitan area to remain on current wide-band channels indefinitely, thus preventing others from realizing the benefits of spectrum refarming.

### **Conclusion**

The County supports the Commission's goals of increasing efficiency in the use of spectrum and allocating new spectrum for public safety communications. We urge the Commission to act expeditiously to implement the recommendations of PSWAC.

Respectfully submitted,

COUNTY OF LOS ANGELES

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<sup>3</sup> See Comments of APCO, PR Docket No. 92-235, filed May 28, 1993.